

In the Claims

Kindly cancel claims 5 and 10, amend claim 28 and add new claims 29 and 30.

1. (Previously amended) An article comprising diamond deposited on a non-metallic framework material substrate having a porosity sufficient to permit the flow of fluids in at least one direction through the material.

2. (Original) The article of claim 1 wherein said framework material substrate comprises a material compatible with a diamond deposition process.

3. (Original) The article of claim 1 wherein said framework material substrate comprises a material incompatible with a diamond deposition process coated with a material compatible with a diamond deposition process.

4. (Original) The article of claim 1 wherein said diamond has a thickness of at least about 2 microns.

5. (Canceled)

6. (Previously amended) An article comprising diamond deposited on a non-metallic open-cell foam substrate having a porosity sufficient to permit the flow of fluids in at least one direction through the material.

7. (Original) The article of claim 6 wherein said framework material substrate comprises a material compatible with a diamond deposition process.

8. (Original) The article of claim 6 wherein said framework material substrate comprises a material incompatible with a diamond deposition process coated with a material compatible with a diamond deposition process.

9. (Original) The article of claim 6 wherein said diamond has a thickness of at least about 2 microns.

10. (Canceled)

11. (Original) The article of claim 6 wherein said article has a porosity of at least 100 voids/inch.

Claims 12 through 27 (Withdrawn)

28. (Currently Amended) An article comprising:  
a non-metallic reticulated unitary structure;  
an interlayer coated on said non-metallic reticulated unitary structure;

a diamond layer deposited on said interlayer configured to form a contiguous open structure configured for fluid flow in more than one axis through said contiguous open structure, wherein said diamond is fully coalesced.

29. (NEW) An article comprising diamond deposited on a non-metallic framework material substrate having a porosity sufficient to permit the flow of fluids in at least one direction through the material, wherein said diamond is fully coalesced.

30. (NEW) An article comprising diamond deposited on a non-metallic open-cell foam substrate having a porosity sufficient to permit the flow of fluids in at least one direction through the material, wherein said diamond is fully coalesced.